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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,124

05/18/2007

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EXAMINER

HENSON, MISCHITA L

ART UNIT

PAPER NUMBER

4146

NOTIFICATION DATE

DELIVERY MODE

05/01/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,124	<b>Applicant(s)</b> NAKAYAMA ET AL.	
	<b>Examiner</b> Mi'schita' Henson	<b>Art Unit</b> 4146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 6 and 7 is/are allowed.
- 6) ☐ Claim(s) 1,3-5, 8-10 is/are rejected.
- 7) ☐ Claim(s) 2 and 11-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>21 December 2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### ***Acknowledgment***

2. Acknowledgment of Amendment filed September 20, 2006 is hereby made. The present Office action is made with all the suggested amendments being fully considered.

### ***Drawings***

3. Figures 8-9 and 18 -20 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 9 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 9 is directed to “a program of instructions” which is considered to be functional descriptive material and does not fall under one of the statutory subject matter categories. See MPEP 2106.01.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chodora in JP 11-118853, in view of Lee in US Publication 200330101387 A1 and Koichi et al. in US Patent 5,661,404. (Claim 9 is rejected as best understood).

Regarding claims 1 and 8-10, Chodora discloses a network analyzer system having at least a pair of ports (the pair of ports is interpreted to be network analyzer side ports, see single pair, [0012]) that is connect to a device under test (see DUT, [0007]) having many ports (the many ports that the analyzer pair extends to on the inspected equipment is interpreted to be device under test side ports, see many ports, [0012]) with a switching means (the switching means is interpreted to be a port connector, see

switching means, [0028]). When a device under test has many ports, one of ordinary skill in the art would understand that the multiple ports can be subdivided by any one of numerous methods to create a main port group and a sub port group suitable to the application. The system of Chodora has a means for calculating the transmission response error coefficient (the means for calculating the transmission response error coefficient is interpreted to be a transmission tracking error determiner, see transmission response error coefficient, [0028]). The network analyzer has a radio frequency output and input ports (the RF output/input is interpreted to be transmission/reception ports, see [0031]). One of ordinary skill in the art would understand the desirability of storing the program of instructions for execution by the computer to perform the processing for analyzing a network on a computer-readable medium.

Chodora differs from the claim invention in that it is silent on a transmission tracking error deriver and connecting a network analyzer to a test set. Koichi et al. discloses a system and method for reducing the number of connections and disconnections of calibration standards in a multi-port system wherein a network analyzer is connected to a test set (see Abstract). Lee discloses a system related to reducing the errors in the transmission of data (see [0005]). In this system a channel estimator is utilized to calculate a transmission error estimation (the channel estimator is interpreted to be a transmission tracking error deriver, see channel estimator, [0026]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Lee and Koichi et al. in the system of Chodora

because Koichi et al. teaches a network measurement device to generally include a network analyzer and a test set (see Abstract) and Lee teaches a method where referencing the error rate to calculate a transmission error estimation is used to reduce transmission errors (see [0026]), thereby improving the functionality of the system.

7. Claims 4 and 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Chodora in JP 11-118853, Lee in US Publication 200330101387 A1 and Koichi et al. in US Patent 5,661,404 as applied to claim 1 above, and further in view of Couasnon et. al in US Patent 4,550,407.

Chodora in JP 11-118853, Lee in US Publication 200330101387 A1 and Koichi et al. in US Patent 5,661,404 teach the limitations of claim 1 as indicated above. Chodora, Lee and Koichi et al. differ from the claimed invention in that they are silent on the network analyzer having a transmission and reception signal measurer. It is well-known in the art that a network analyzer is comprised of both a transmission and reception signal measurer as is taught by Couasnon et al. Couasnon et al. teaches a network analyzer (see network analyzer, column 1 lines 7-11) that tests, measures, or monitors data transmitted over the network (see network analyzer, column 2 lines 54-57). Couasnon et al. teaches a test tool (test tool is interpreted to be a reception signal measurer, column 1 lines 18-21) that measures the quality of the signal reception and means for measuring parameters related to characteristics of the data being broadcasted (the means for measuring parameters is interpreted to be a transmission signal measurer, see "transparent mode", column 1 lines 36-38). One of ordinary skill in the art would recognize that reception signals include reflected transmission signals that

occur as a result of imperfections (i.e. impedance mismatches, non linear changes, etc.) in the transmission medium.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Couasnon et al. in the system of Chodora, Lee and Koichi et al. because Couasnon et al. teaches that transmission and reception signal measures are components of a network analyzer. Further, one of ordinary skill in the art would recognize the necessity of signal measurers to determine that the transmitted signal was received and whether or not the signal had transmission errors.

***Allowable Subject Matter***

8. Claims 2 and 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 6-7 allowed. The following is an examiner's statement of reasons for allowance: None of the references of record alone or in combination disclose or suggest deriving a transmission tracking error other than the transmission tracking error determined by said transmission tracking error determining based on the transmission tracking error determined by said transmission tracking error determining step.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mi'schita' Henson whose telephone number is (571) 270-3944. The examiner can normally be reached on Monday - Thursday 7:30 a.m. - 4:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marvin Lateef can be reached on (571) 272-5026. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

m.h.  
4/21/08

/Marvin M. Lateef/

Supervisory Patent Examiner, Art Unit 4146